Services offered by the U.S. National Fungus Collections

The facilities, programs, and staff of the U.S. National Fungus Collections provide a resource for addressing fungal problems such as invasive species.

Specimens can be used to identify suspected pathogens. Specimens are loaned to research organizations throughout the world. Support also is provided to the plant quarantine program of the Animal and Plant Health Inspection Service (APHIS). As international travel and commodity shipments increase, development of information on fungi of foreign origin is necessary for protecting agriculture.

Services offered include assistance with fungal nomenclature and synonymy, fungal identification, herbarium specimen data, records of distribution and pathogenicity, and identification of poisonous mushrooms. Services are provided to mycologists, plant pathologists, plant quarantine officials, physicians, and the lay public.

Loans: The specimens in the U.S. National Fungus Collections are available for scientific study by qualified visitors. Requests to borrow specimens are considered from recognized institutions and scientists.

Deposits: Dried fungal specimens of scientific interest can be deposited at the U.S. National Fungus Collections. For instructions on how to prepare specimens for deposit, contact the Herbarium Manager at herbarium@nt.ars-grin.gov.

Contact the U.S. National Fungus Collections:

Herbarium Manager
U.S. National Fungus Collections
Systematic Botany and Mycology Laboratory
USDA-Agricultural Research Service
Rm. 304, Bldg. 011A
10300 Baltimore Ave.
Beltsville, MD 20705-2350 USA
Phone: 301-504-5364 / Fax: 301-504-5810
Email: herbarium@nt.ars-grin.gov
Web: http://www.ars.usda.gov/ba/psi/sbml

Search the specimen database at
http://nt.ars-grin.gov/fungaldatabases/

Systematic Botany & Mycology Laboratory

The U.S. National Fungus Collections

The **U.S. National Fungus Collections (BPI)** is the repository for over one million dried fungal specimens and is the largest fungal herbarium in the world. It is a resource for research and service in national and international mycology and plant pathology. Specimen data for these collections are available on the Internet at **http://nt.ars-grin.gov/fungaldatabases/**.

Plant Sciences Institute
Henry A. Wallace Beltsville Agricultural Research Center
Agricultural Research Service
United States Department of Agriculture
Beltsville, Maryland

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USDA

Systematic Botany & Mycology Laboratory

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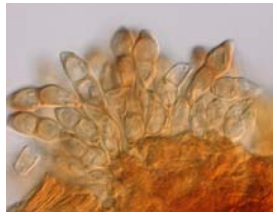
The Role of the U.S. National Fungus Collections

Fungal specimens maintained in this herbarium contain a wealth of information about fungi through time and space. The knowledge locked in these specimens greatly enhances our understanding of biodiversity.

Progress has been made toward this end. Data associated with specimens in the U.S. National Fungus Collections are available on-line. Plant quarantine officials may need to know the fungal pathogens of conifers that threaten the U.S. if raw logs were imported from Siberia. They can easily generate a list of all fungi reported on *Abies* or *Picea* in Russia. Or to find out where to collect morels and when they will be fruiting, just check the data for the deposited specimens of *Morchella*.

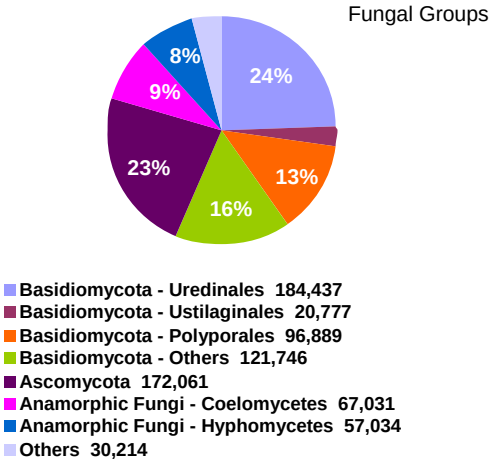
Need to identify a rust fungus on *Gladiolus*? Search for rust specimens on *Gladiolus* to narrow down the possible pathogens.

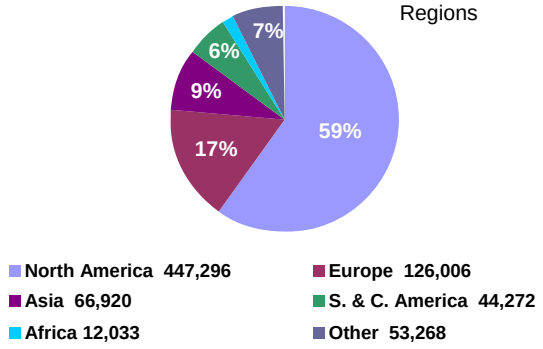


A source of DNA: Herbarium specimens are increasingly useful as a source of DNA. For example, DNA from herbarium specimens was used to determine the spread of *Phytophthora infestans*, cause of the Irish potato famine, from the Andes to Europe and finally North America.

New uses: Past scientists who documented their research with specimens could not have imagined how useful these would be to modern workers. Today's specimens will undoubtedly serve future investigators in new ways. The U.S. National Fungus Collections serves as a unique and invaluable scientific resource.

U.S. National Fungus Collections (BPI) Specimen Profile





The five most common host families are Poaceae (60,917 specimens), Rosaceae (49,592), Asteraceae (41,155), Pinaceae (39,315) and Fabaceae (29,999).

The herbarium also contains more than 25,000 **type specimens** from which the descriptions of new species were made.